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Amendments to the Specification

In the specification Brief Description of the Drawings Section, please amend the paragraphs on page 8, line 12 as follows:

Figures 8a, 8b, 8c and 8d 8e shows 2R regeneration for approximately 10 Gb/s RZ data.

Please amend the paragraph at page 13, lines 4-13 as follows:

The exponential amplification and limiting amplification are also possibly realized by just one piece of fiber. The idler power vs. pump peak power relationship is shown in Fig. 6. To demonstrate the format transparency, RZ and NRZ data signals are used as the pump respectively. The emergence of gain flattened (limiting gain) region is due to self-phase modulation induced spectral broadening which cause the pump power to be transferred to its neighboring frequencies rather than to the idler.. If the bit 0's of the pump signal are located in the exponential region while the bit 1's are located at the saturation region, the noises of both bit 1's and bit 0's will be reduced and the extinction ratio will be improved at the same time. Figures 7a, 7b, 7c and 7d, and Fig.8a, 8b, 8c and 8d 8e simulates the signal regeneration for NRZ and RZ format respectively.